CLAIMS

1. An information processing apparatus, comprising:

a plurality of classifying adaptive processing circuits for performing a classifying adaptive process for an input information signal; and

a switching circuit for switching a connection relation among said plurality of classifying adaptive processing circuits.

2. The information processing apparatus as set forth in claim 1,

wherein at least one of said classifying adaptive processing circuits is configured for switching the corresponding classifying adaptive process for the corresponding information signal as the connection relation of said switching circuit is switched.

3. The information processing apparatus as set forth in claim 1,

wherein at least one of said plurality of classifying adaptive processing circuits is configured for switching the structure of the corresponding classifying adaptive process as the connection relation of said switching circuit is switched.

4. The information processing apparatus as set forth in claim 3,

wherein the structure represents a structure

of class taps or a structure of predictive taps.

5. The information processing apparatus as set forth in claim 2,

wherein at least one of said plurality of classifying adaptive processing circuits is configured for switching a coefficient of the corresponding classifying adaptive process so as to switch the process for the corresponding information signal as the connection relation is switched by said switching circuit.

6. The information processing apparatus as set forth in claim 1,

wherein the input information signals are output through said plurality of classifying adaptive processing circuits.

7. The information processing apparatus as set forth in claim 1, further comprising:

a pre-processing circuit for performing a predetermined process for the input information signal and switching the predetermined process as the connection relation is switched,

wherein an output of said pre-processing circuit is input to the corresponding one of said plurality of classifying adaptive processing circuits.

8. The information processing apparatus as set forth in claim 1, further comprising:

a post-processing circuit for performing a

predetermined process for the corresponding input information signal and switching the predetermined process as the connection relation is switched,

wherein an output of one of said plurality of classifying adaptive circuits is input to said post-processing circuit.

9. The information processing apparatus as set forth in claim 1,

wherein the information signals are picture data composed of pixel information, and

wherein one of said plurality of classifying adaptive processing circuits is configured for performing the classifying adaptive process based on the pixel information of the corresponding input information signal and predicting pixel information that has to be present between the pixel information of the input information signal and pixel information adjacent thereto so as to improve the resolution of the picture data.

10. The information processing apparatus as set forth in claim 1,

wherein the information signals are picture data composed of pixel information,

wherein one of said plurality of classifying adaptive process circuits is configured for performing the classifying adaptive process for the corresponding input information signal using a prepared left eye

coefficient and predicting pixel information of left-eye picture data and for performing the classifying adaptive process for the corresponding input information signal using a prepared right-eye coefficient and predicting pixel information of right-eye picture data so as to generate stereo picture data with the left-eye picture data and the right-eye picture data.

11. The information processing apparatus as set forth in claim 1,

wherein the information signals are picture data composed of pixel information,

wherein one of said plurality of classifying adaptive processing circuits is configured for performing the classifying adaptive process for the corresponding input information signal using a prepared luminance signal coefficient and predicting a luminance signal component of the picture data and another one of said plurality of classifying adaptive processing circuits is configured for performing the classifying adaptive process using prepared color difference signal coefficients and predicting color difference components of the picture data so as to separate the picture data into the luminance component and the color difference components.

12. The information processing apparatus as set forth in claim 1,

wherein the information signals are picture data composed of pixel information,

wherein at least two of said plurality of classifying adaptive processing circuits are configured for performing the classifying adaptive process for the pixel information having different phases and changing the number of pixel information that composes the picture data.

13. The information processing apparatus as set forth in claim 1,

wherein the information signals are picture data composed of pixel information,

wherein at least two of said plurality of classifying adaptive processing circuits are configured for performing the classifying adaptive process and obtaining a plurality of picture data having different resolutions corresponding to the classifying adaptive process performed by said plurality of classifying adaptive processing circuits.

14. The information processing apparatus as set forth in claim 1,

wherein one of said plurality of classifying adaptive processing circuits is configured for performing the classifying adaptive process for the corresponding input information signal and obtaining picture data having a first resolution and another one of said plurality of classifying adaptive processing

circuits is configured for performing the classifying adaptive process for picture data having the first resolution and obtaining picture data having a second resolution.

15. The information processing apparatus as set forth in claim 1,

wherein the information signals are picture data composed of pixel information and structured in the unit of a frame, and

wherein one of said plurality of classifying adaptive processing circuits is configured for performing the classifying adaptive process for the corresponding information signal that is input in the unit of a frame and generating picture data of frames chronologically preceded and followed by a frame of the input information signal.